

NOT ENTERED

[0001] **CYCLIC PALLADIUM COMPOUNDS HAVING COORDINATED
THERETO BIS (DIPHENYLPHOSPHINE) FERROCENE LIGANDS WHICH
INHIBIT THE ACTIVITY OF PROTEINS AND ENZYMES AND
TREATMENT OF DISEASES AND DISORDERS ASSOCIATED
THEREWITH.**

[0002] **FIELD OF THE INVENTION**

[0003] The invention refers to cyclopalladated compounds containing bis-diphenylphosphine-ferrocene coordinated ligands and their analogues as active inhibitors for peptides and enzymes comprising serine peptidase, cysteine-protease, metallo-protease and endopeptidase families, many of which are essential for the route of growth and metastasis of malignant tumors. Acting over these enzymes and taking part of insertions with DNA molecules, these compounds modulate the immunological system.

[0004] **BACKGROUND**

[0005] The study of inorganic chemistry in the pharmaceutical field has been receiving special attention from researchers due to the clear advantages of its use over traditional medicines for the treatment of a series of pathologies.

[0006] The best-studied inorganic pharmaceutical is cisplatin, a drug which has been clinically used for the treatment of a wide range of tumors. It is believed that its action occurs by means of interaction with DNA, thus inhibiting the proliferation of tumor cells (Lippard, *Science* 218: 1075-1082 (1982); Rosenberg, *Nature* 222: 385 (1969); Cleare et al, *Bioinorg. Chem.* 2: 187 (1973)). This compound is efficient for the combat against various kinds of tumors and is highly cytotoxic, being also extensive to normal cells (Ebert, U., Loffler, H., Kirch, W., *Pharmacology & Therapeutics*, 74: (2) 207-220 1997; Spencer C. M., Goa K. L., *Drugs*, 50: (6) 1001-